

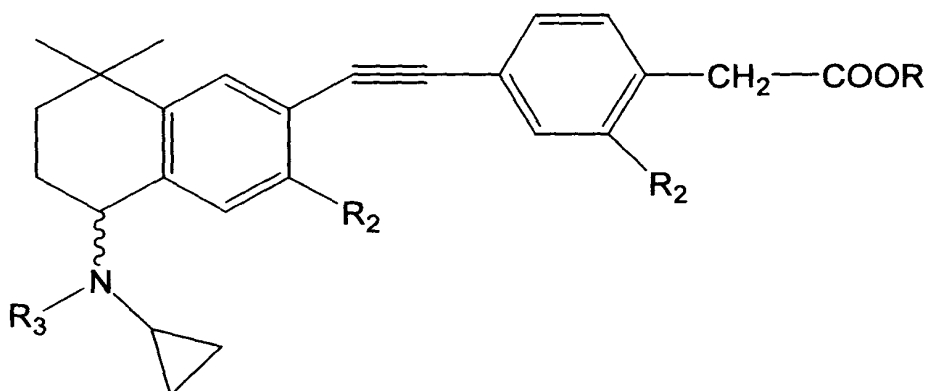
**WHAT IS CLAIMED IS:**

1. A method of co-administering to a mammal a compound of category (1) defined as a compound that has inhibitory effect on the CP450RAI enzyme of the mammal and  
a compound of category (2) defined as a compound selected from the group consisting of vitamin A, a derivative of vitamin A having vitamin A like biological activity, retinoic acid and a retinoid, to prevent, treat or delay the onset of a disease or condition that is prevented, treated or the onset of which is delayed by administration of a retinoid compound or by the mammal's naturally occurring retinoic acid.
2. A method in accordance with Claim 1 where the compound of category (1) and the compound of category (2) are co-administered to a human being.
3. A method in accordance with Claim 2 where the compound of category (1) and the compound of category (2) are co-administered in a single formulation.
4. A method in accordance with Claim 2 the compound of category (1) and the compound of category (2) are co-administered in two separate formulations.
5. A method in accordance with Claim 2 where the compound of category (1) and the compound of category (2) are both administered topically.
6. A method in accordance with Claim 5 where the compound of category (1) and the compound of category (2) are administered to prevent, treat or delay the onset of photodamage to the skin, acne or psoriasis.
7. A method in accordance with Claim 1 where the compound of category (2) is vitamin A.
8. A method in accordance with Claim 2 where the compound of

category (2) is vitamin A.

9. A method in accordance with Claim 6 where the compound of category (2) is vitamin A.

10. A method in accordance with Claim 1 where the compound of category (1) has the formula



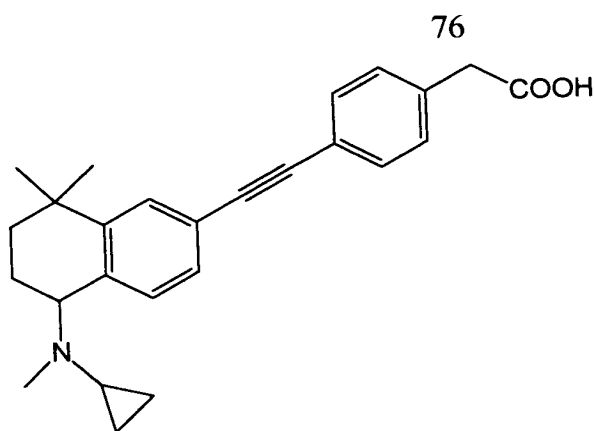
where  $R_2$  represents halogen or alkyl of 1 to 6 carbons,  $R_3$  is alkyl of 1 to 6 carbons, and  $R$  is H, alkyl of 1 to 6 carbons,  $-CH_2OR_4$ ,  $CH_2-O-COR_4$ , or a cation of a pharmaceutically acceptable base, and  $R_4$  is or alkyl having 1 to 6 carbons.

11. A method in accordance with Claim 10 where the compound of category (2) is vitamin A.

12. A method in accordance with Claim 10 where in the formula  $R_2$  is H, F, or methyl,  $R_3$  is methyl and  $R$  is H or a pharmaceutically acceptable salt thereof, or  $CH_2-O-COCH_3$ .

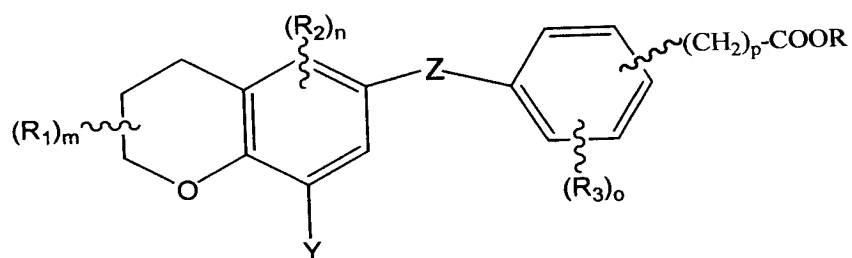
13. A method in accordance with Claim 12 where the compound of category (2) is vitamin A.

14. A method in accordance with Claim 10 where the compound of category (1) is



15. A method in accordance with Claim 14 where the compound of category (2) is vitamin A.

16. A method in accordance with Claim 1 where the compound of category (1) has the formula



wherein **Z** is COO or  $C\equiv C$ ;

**R<sub>1</sub>** is alkyl having 1 to 6 carbons;

**R<sub>2</sub>** is independently alkyl of 1 to 6 carbons, F, Cl, Br, I, CF<sub>3</sub>, fluoro substituted alkyl of 1 to 6 carbons, OH, SH, alkoxy of 1 to 6 carbons or alkylthio of 1 to 6 carbons;

**R<sub>3</sub>** is independently alkyl of 1 to 6 carbons, F, Cl, Br, I, CF<sub>3</sub>, fluoro substituted alkyl of 1 to 6 carbons, OH, SH, alkoxy of 1 to 6 carbons or alkylthio of 1 to 6 carbons;

**m** is an integer having the values of 0 to 6;

**n** is an integer having the values of 0 to 2;

**o** is an integer having the values 0 to 4;

**p** is an integer having the values 0, 1, or 2;

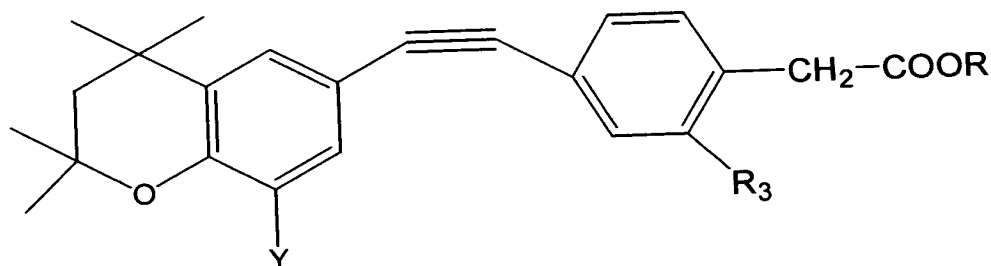
**Y** is  $\text{CH}\equiv\text{C}-$ ,  $\text{CH}\equiv\text{C}-\text{CH}_2-$ ;  $\text{CH}_2=\text{CH}-$  or  $\text{C}\equiv\text{N}$ ;

**R** is H, alkyl of 1 to 6 carbons,  $-\text{CH}_2\text{OR}_4$ ,  $\text{CH}_2-\text{O}-\text{COR}_4$ , or a cation of a pharmaceutically acceptable base, and

**R<sub>4</sub>** is alkyl having 1 to 6 carbons.

17. A method in accordance with Claim 16 where the compound of category (2) is vitamin A.

18. A method in accordance with Claim 16 where the compound has the formula



wherein **Y** is  $\text{CH}\equiv\text{C}-$   $\text{CH}\equiv\text{C}-\text{CH}_2-$ ;

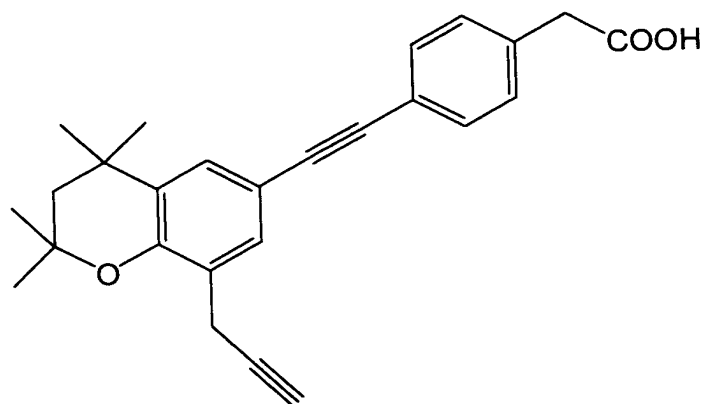
**R<sub>3</sub>** is H or F;

**R** is H, alkyl of 1 to 6 carbons,  $-\text{CH}_2\text{OR}_4$ ,  $\text{CH}_2-\text{O}-\text{COR}_4$ , or a cation of a pharmaceutically acceptable base, and

**R<sub>4</sub>** is alkyl having 1 to 6 carbons.

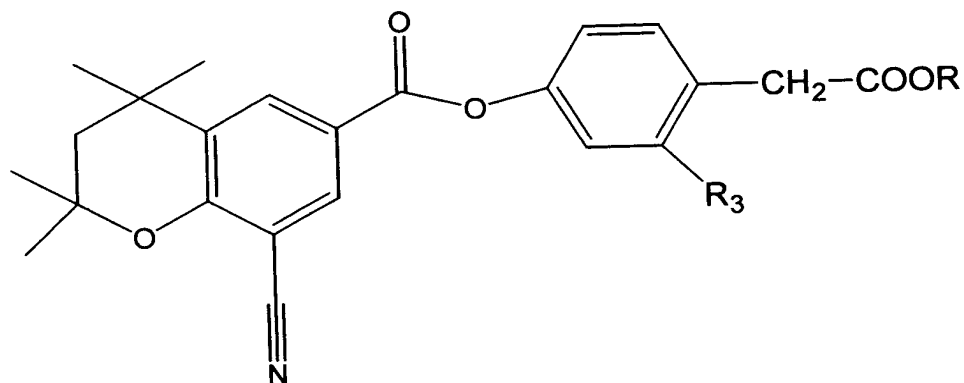
19. A method in accordance with Claim 18 where the compound has

the formula



20. A method in accordance with Claim 19 where the compound of category (2) is vitamin A.

21. A method in accordance with Claim 16 where the compound of category (2) has the formula

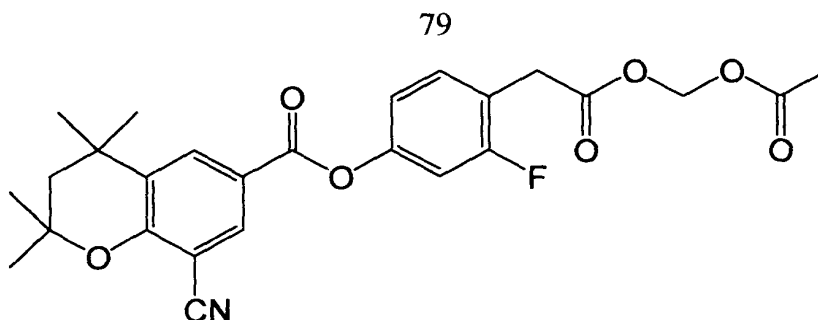


wherein **R<sub>3</sub>** is H or F;

**R** is H, alkyl of 1 to 6 carbons, -CH<sub>2</sub>OR<sub>4</sub>, CH<sub>2</sub>-O-COR<sub>4</sub>, or a cation of a pharmaceutically acceptable base, and

**R<sub>4</sub>** is alkyl having 1 to 6 carbons.

22. A method in accordance with Claim 21 where the compound has the formula



**23.** A method in accordance with Claim 22 where the compound of category (2) is vitamin A.

**24.** A method in accordance with Claim 1 where the compound of category (1) and the compound of category (2) are administered topically in a formulation or formulations containing between 0.1 and 10.0 milligrams per milliliter of formulation of the compound of category (1) and between 0.01 mg to 10 mg per milliliter of the formulation of the compound of category (2).

**25.** A method in accordance with Claim 24 where the compound of category (1) and the compound of category (2) are administered topically in a formulation or formulations containing between 1.0 and 5.0 milligrams per milliliter of formulation of the compound of category (1) and between 1.0 mg to 5.0 mg per milliliter of the formulation of the compound of category (2).

**26.** A method in accordance with Claim 1 where the compound of category (1) and the compound of category (2) are administered systemically in a daily dose containing between 0.01 and 5.0 mg per kg body weight of the mammal of the compound of category (1) and between 0.01 mg to 5.0 mg per kg body weight of the mammal of the compound of category (2).

**27.** A method in accordance with Claim 26 where the compound of category (1) and the compound of category (2) are administered systemically in a daily dose containing between 0.1 and 2.5 mg per kg

body weight of the mammal of the compound of category (1) and between 0.1 mg to 2.5 mg per kg body weight of the mammal of the compound of category (2).

**28.** A pharmaceutical composition for administration to a mammal containing a pharmaceutically acceptable excipient and an effective dose of a compound of category (1) defined as a compound that has inhibitory effect on the CP450RAI enzyme of the mammal and

a compound of category (2) defined as a compound selected from the group consisting of vitamin A, a derivative of vitamin A having vitamin A like biological activity, reinoic acid and a retinoid, to prevent, treat or delay the onset of a disease or condition that is prevented, treated or the onset of which is delayed by administration of a retinoid compound or by the mammal's naturally occurring retinoic acid.

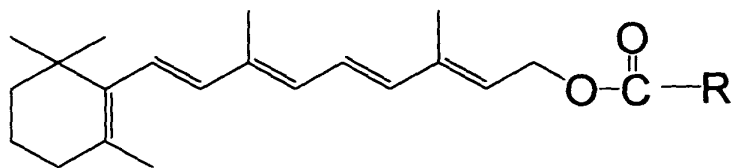
**29.** A pharmaceutical composition in accordance with Claim 28 adapted for topical administration to a human being.

**30.** A pharmaceutical composition in accordance with Claim 29 where the compound of category (2) is vitamin A.

**31.** A pharmaceutical composition in accordance with Claim 28 adapted for systemic administration to a human being.

**32.** A pharmaceutical composition in accordance with Claim 31 where the compound of category (2) is vitamin A.

**33.** A pharmaceutical composition for administration to a mammal containing a pharmaceutically acceptable excipient and an effective dose of a compound of the formula



to prevent, treat or delay the onset of a disease or condition that is prevented, treated or the onset of which is delayed by administration of a retinoid compound or by the mammal's naturally occurring retinoic acid where the variable **R** represents the residue of a compound having the structure **R-COOH** that has inhibitory effect on the CP450RAI enzyme of the mammal.

**34.** A pharmaceutical composition in accordance with Claim 33 adapted for topical administration to a human being.